

## REMARKS

Claims 1-11, 30-39 and 46-65 are pending in the application. Claims 49-61 have been withdrawn from consideration. Claims 13-16 have been cancelled without prejudice.

Claim 1 stands rejected under Section 112, second paragraph, as being indefinite. Claim 1 has been amended to obviate the basis for the rejection. Reconsideration and withdrawal of the Section 112 rejection is solicited.

All claims under consideration have been rejected under Section 103 as obvious over U.S. Patent No. 4,949,005 to Parham et al. (“Parham ‘005”) in view of U.S. Patent No. 5,536,991 to Parham et al. (“Parham ‘991”) and one or more additional references.

**1. The combination of references fail to teach all claim limitations – there is no teaching of protecting a coated surface from the heat required for sealing the lamp.**

The examiner concedes that Parham ‘005 fails to teach a method of assembling a lamp wherein the light emitting chamber is coated prior to sealing the end portions of the lamp wherein the coating on the chamber is protected from the heat required to seal the end portions of the lamp (Office Action, p. 4).

Applicant’s discussion in the Amendment dated February 28, 2006, distinguishing the claimed invention from Parham ‘005 is incorporated herein by reference.

The examiner relies on Parham ‘991 as teaching the application of a protective silica coating to protect an underlying coating from high temperatures. The examiner is

in error as to the teaching of Parham '991. Parham '991 teaches the application of a silica protective coating 11 (Fig. 1(a)) to protect an underlying reflective coating 26 from "abrasion, moisture, and cleaning solvents" (Abstract), and that coating 11 increases "abrasion resistance, [and] increases moisture and acetone resistance ...." (Col.1, lines 52-53). Contrary to the examiner's assertion, there is no teaching or suggestion in Parham '991 of protecting the underlying coating 26 from high temperatures.

The examiner's reliance on the teaching in Parham '991 that the protective coating 11 "will withstand the high temperature conditions and thermal cycling experienced on incandescent and arc discharge lamps" is misplaced. This teaching merely states that the protective coating 11 can withstand the operating conditions of the lamp where the heat is generated by the operation of the lamp, e.g., by the incandescence of the filament in an incandescent lamp. It is clear that a protective coating external to an underlying coating cannot protect the underlying coating from heat generated within the light emitting chamber of the lamp. Thus there is no teaching or suggestion from Parham '991 of protecting a coating from the heat required to seal the end portions of a lamp.

Thus the combination of references relied upon by the examiner fails to teach the protection of an external coating on the light emitting chamber (without regard to the shape of the chamber) from the heat required to seal the end portions of the lamp.

Independent Claims 1, 11, 30, 37, 39, 46, 64 and 65 require, in various terms recited below, protecting the coating from the heat of the hermetic sealing process, i.e., the claims recite, *inter alia*:

Claim 1: “sealing each of the tubular end portions with a respective heat source . . . protecting the coated surface . . . from the heat source”

Claim 11: “protecting the coated surfaces from at least one heat source . . . sealing the burner envelope with a respective one of said heat sources”

Claim 30: “protecting the deposited layer of material from at least one heat source . . . sealing . . . by heating . . . with said heat sources”

Claim 37: “sealing is performed by exposing . . . to temperatures greater than the certain temperature, the step of preventing the exposure of the coated portions”

Claim 39: “which shields the first coating from exposure to temperatures greater than the certain temperature during the sealing process”

Claim 46: “protecting said coated surface from at least one heat source . . . hermetically sealing . . . using . . . at least one respective heat source”

Claim 64: “hermetically sealing . . . the step of shielding portions of the IR reflective coating”

Claim 65: “pinch sealing . . . while shielding . . . to thereby prevent exposure of the coating thereon from temperatures that would damage the coating.”

Since the combination of references relied upon by the examiner fails to teach or suggest these limitations, the rejections of these claims, and those claims dependent therefrom, must be withdrawn. Reconsideration and withdrawal of the rejections to independent Claims 1, 11, 30, 37, 39, 46, 64, and 65, and those claims dependent therefrom, is solicited.

## **2. The combination of Parham ‘005 with Parham ‘991 is improper.**

The examiner has provided no basis for combining the teachings of Parham ‘005 and Parham ‘991 as required to establish a *prima facie* case of obviousness. There is no suggestion or motivation from either reference to combine the references as asserted.

Reconsideration and withdrawal of all claim rejection that rely on the combination is solicited.

**3. The combination of references fails to teach all claim limitations –  
there is no teaching of coating a bulbous light emitting chamber prior to sealing the end portions of a lamp.**

As stated, the examiner concedes that Parham '005 fails to teach the assembly of a lamp having a bulbous light emitting chamber (Office Action, p. 4). The examiner relies on the teaching of U.S. Patent No. 4,959,585 to Hoegler et al. that a coated lamp can have a bulbous elliptical shape. However, the examiner relies on the misstated teaching of Parham '991 in order to combine the teachings of Parham '005 and Parham '991 with the teaching of Hoegler et al. Since the basis of the combination is clearly in error (i.e., there is no teaching or suggestion from Parham '991 of the protection of an underlying coating from the heat required to seal the end portion of the lamp as erroneously relied upon), the combination is not proper. Reconsideration and withdrawal of all rejections based on this improper combination is solicited.

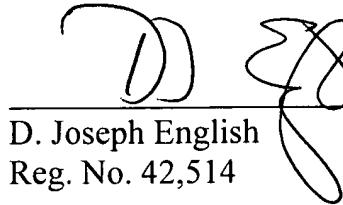
**4. The combination of references fails to teach all claim limitations –  
there is no teaching of repositioning a filament for the lowest power to maintain the filament at a constant temperature.**

The Examiner continues to rely on Hollenbeck in rejecting Claim 63. Hollenbeck merely discloses that a the orientation of a filament relative to an external reference point

may be determined by monitoring the electric field generated by current flowing through the filament. However, there is no teaching or suggestion in Hollenbeck of a method of aligning a filament in a lamp including the step "repositioning the filament to a position requiring the lowest applied power to maintain the filament at a constant temperature." For example, where is the teaching of monitoring applied power? Where is the teaching of determining the lowest applied power to maintain the filament at a constant temperature? The combination of references fails to disclose each of the claim limitations and the rejection must be withdrawn. Reconsideration and withdrawal of the rejections based on the combination including Hollenbeck is solicited.

A further and favorable action and allowance of all claims is solicited.

Respectfully submitted,

  
D. Joseph English  
Reg. No. 42,514

DUANE MORRIS LLP  
1667 K Street, N.W., Suite 700  
Washington, D.C. 20006  
Telephone: (202) 776-7800  
Telecopier: (202) 776-7801

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